



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,320	11/19/2001	Eric R. Shute	12003-218	7358

7590

07/09/2003

C. John Brannon  
Woodard, Emhardt, Naughton, Moriarty and McNett  
Bank One Center/Tower  
111 Monument Circle, Suite 3700  
Indianapolis, IN 46204-5137

EXAMINER

CARIASO, ALAN B

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n N .

Applicant(s)

09/992,320

DALTON ET AL.

Examiner

Art Unit

Alan Cariaso

2875

-- The MAILING DATE of this c mmunication appears on the cover sheet with the c rrespondenc address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-12 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 9-12 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 6-8 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed April 15, 2003 is acknowledged. Current pending claims are 1-4, 6-12 and 16-19. Claims 5 and 13-15 are cancelled. Claims 1, 6, 9, 16 and 19 are amended.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6-8 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by NAKABAYASHI et al (US 6,379,017).
4. NAKABAYASHI discloses a housing or light pipe (light guide member 3, figs.12,11-13) comprising an optically transparent volume or transparent member (col.8, lines 35-38) having a first refractive index ( $n=1.5$ , col.8, lines 54 & 61); an optical entry point defined on a side surface adjacent light source (1); an optical transit point (point of internal reflection on 31-fig.3) defined within the optically transparent volume (3); first and second pockets (31-figs.2,3,11-13) formed in the optically transparent

volume (3); an optical exit point (in figs.3-4, it would be at least any point by the bottom surface through which light exits); wherein the first pocket (any left-side slits 31 closer to the light source 1) defines a first 3-D negative object (fig.3) within the optically transparent volume (3,n) having a second refractive index ( $n_1=1$ , col.8, line 61) substantially less than the first refractive index ( $n=1.5$  or  $1.42$ ); wherein the first and second pockets (31) are substantially encased (figs.3,11) by the optically transparent volume (3,n); wherein the first pocket (left-side slit 31) is shaped to reflect a beam of light passing through the optical entry point (near 1) and incident upon the first pocket (left-side slit 31) to the optical transit point (fig.3); where in the second pocket (any 2<sup>nd</sup> to right-side position slits 31 away from light source 1) defines a first 3-D negative object (fig.3) within the optically transparent volume (3,n) having a third refractive index ( $n_2=1$ , col.8, line 61) substantially less than the first refractive index ( $n=1.5$  or  $1.42$ ); wherein the first and second pockets (31) are substantially encased (figs.3,11) by the optically transparent volume (3,n); wherein the second pockets are shaped to totally internally reflect a beam of light from the first pocket passing through the optical transit point and incident upon the second pocket to the optical exit point (col.9, lines 26-31); wherein the first and second pockets are filled with air (col.8, lines 47-49); wherein the second and third refractive indices are substantially unity ( $n_1=n_2=1$ ; col.8, line 61).

***Allowable Subject Matter***

5. Claims 1-4, 9-12 and 16-18 are allowed.

***R s p o n s   t o   A r g u m e n t s***

6.      Applicant's amendment with arguments, filed April 15, 2003, with respect to the rejection(s) of claim(s) 6-8 and 19 under SAKAKIBARA (US 4,625,262) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of NAKABAYASHI et al (US 6,379,017).

***C o n c l u s i o n***


7.      Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Cariaso whose telephone number is (703) 308-1952. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Alan Cariaso  
Primary Examiner  
Art Unit 2875

AC  
June 17, 2003